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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,826	10/30/2001	John R. Geary	P00078US1A (P271)	1042

7590

04/24/2003

Chief Intellectual Property Counsel
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EXAMINER

VO, HAI

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 04/24/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/020,826

Applicant(s)

GEARY ET AL.

Examiner

Hai Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 8-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-7 and 20, drawn to a composite board, classified in class 428, subclass 317.9.
 - II. Claims 8-19, drawn to a method of making a composite board, classified in class 264, subclass various.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process such as one that sandwiches a preform of the reinforced foam core between the two facer sheets so as to eliminate the curing step of the polymer foam.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
3. During a telephone conversation with Donald Bobak on 03/25/2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-7 and 20. Affirmation of this election must be made by applicant in replying to this

Office action. Claims 8-19 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification objections

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).
Correction of the following is required. According to claim 20, the composite board having a layer construction in an order: facer/filled foam core/facer/substrate material. Applicants need to state where it is supported in the instant specification.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 recites the limitation "said lower surface" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Frisch et al (US 5,091,436). Frisch teaches a composite board comprising a reinforced foam core sandwiched between two skins. Frisch teaches the reinforcing materials made of continuous fiberglass strands (abstract) and skins of fiberglass strands or yarn (column 5, lines 54-57). Since the nature of a facer material and a substrate material are not specifically recited in the claims, the facer and the substrate materials are not independent from each other. It is the examiner's position that Frisch anticipates the claimed subject matter.
9. Claims 1, and 3-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Collins et al (US 5,846,461). Collins teaches a carpet padding comprising a polyurethane foam bottom layer 130 formed of the polyurethane foam composition having a filler of ground vehicle tires and a polyurethane foam upper layer 132. The foam laminate layers 130 and 132 are surrounded by and bonded to the upper layer and lower polyurethane sheets 92 and 94 respectively (figure 7, column 11, lines 16-22). Collins teaches a carpet padding comprising the two polyethylene liners on either side of the foam (column 11, lines 30-34). It is the examiner's position that Collins anticipates the claimed subject matter.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al (US 5,846,461) in view of Ghobary et al (US 6,395,796). Collins is silent as to the iso index of polyisocyanurate. Therefore, it is necessary and thus obvious for the skilled artisan to look to the prior art for a suitable index of the polyisocyanurate. Ghobary reference is directed to a process of making a polyurethane foam suitable for uses as a carpet padding(column 2, lines 23-25). Ghobary teaches a polyisocyanurate rigid foam produced at indices of 250-400 (column 10, lines 8-10), meeting the range set out in the claims. In an absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the polyisocyanurate foam having an iso index within the range instantly claimed, motivated by the desire to successfully practice the invention of Collins. Such an iso index is also taught by the prior art to produce a rigid foam which is important to the invention of Collins, thus further suggesting the modification.

12. Claims 1-7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clayton et al (US 5,735,092) in view of Hunter, Jr. (US 6,024,147). Clayton teaches a composite roofing member including a foam core 11 selected from the group consisting of polyisocyanurate, polyurethane and mixtures thereof; a facer 13 applied to one surface of the foam core and made of a reinforced polymer material; and gypsum board 14 applied to the opposite surface of the foam core (figure 1). Clayton further discloses a weather protective layer being applied to

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the recovery board (column 6, lines 10-15). Since the nature of a facer material and a substrate material are not specially recited in the claims, the facer and the substrate materials are not independent from each other. Clayton discloses the polyisocyanurate foam having an iso index above 200 (column 5, line 7). Clayton is silent as to a foam core having been reinforced with a filler material. Hunter, Jr. teaches a method for applying reinforced foam roofing involving the use of a reinforcing fiberglass (column 8, lines 33-36). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the reinforcing fabric into the foam core of Clayton motivated by the desire to increase the strength of the composite roofing member.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on Tue-Fri, 8:30-6:00 and on alternating Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV
April 16, 2003

A handwritten signature in black ink, appearing to read "Terrel Morris", with a stylized, flowing script.

TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700